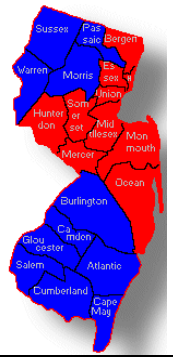
Respiratory Virus Surveillance Report[1]

New Jersey Department of Health

Communicable Disease Service

Week ending January 05, 2013 (MMWR week 1)

SYNOPSIS

Influenza Activity Level[2]	
State Activity Week ending 01/05: **HIGH**	
Current week Last year: **LOW**	
Regional[3] Data	
Northwest	MODERATE
Northeast	HIGH
Central West	HIGH
Central East	HIGH
South	MODERATE

ILI Activity[4]				
	Percent ILI/Absenteeism			Baselines
	Current week (range by county)	Last week Current year	Current week Last year	Non-season[5] Season[6] (3 low, 3 high)
Long Term Care Facilities	1.76 (0.00, 3.49)	0.89	0.54	0.59 (0.62, 0.85)
Schools (absenteeism)	10.31 (2.55, 13.08)	0	5.17	3.85 (4.75, 4.85)
Emergency Departments	7.58 (1.36, 16.36)	7.61	3.93	2.59 (3.43, 4.34)

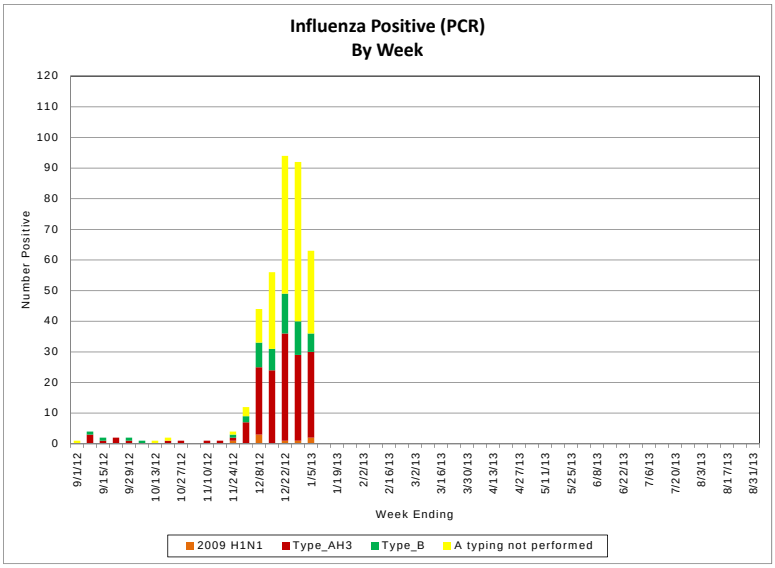
Viral Activity[7]			
	Current Week	Past 3 Weeks	Cumulative Total
Influenza H1N1 (2009)	2	4	8
Influenza H3N2	28	91	156
Influenza B	6	30	52
Respiratory Syncytial Virus (RSV)	169	678	1324
Rapid Influenza Tests	443	789	918

ILINet Providers			
Current Week		Previous Week	
#of reporters	%ILI	#of reporters	%ILI
7	4.71	15	5.59

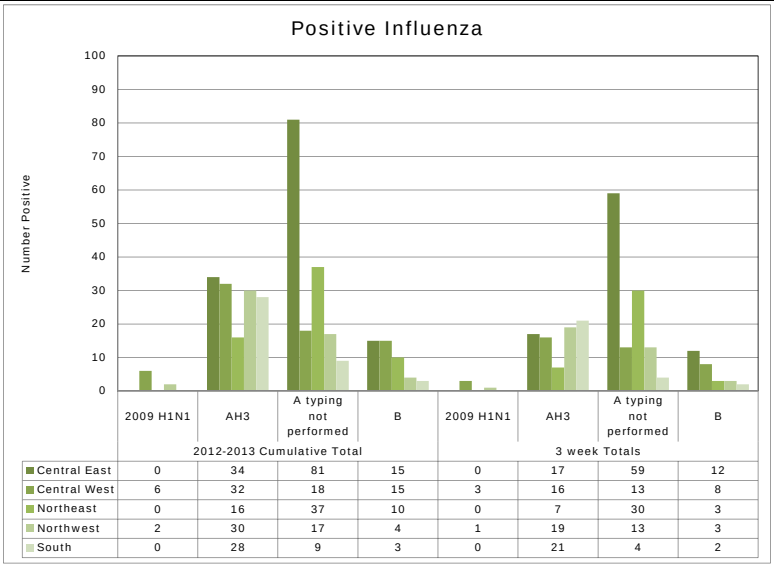
Report also available at: http://nj.gov/health/flu/fluinfo.shtml

Virologic Surveillance[7]

Influenza Positive Specimens (PCR) - Result by Week

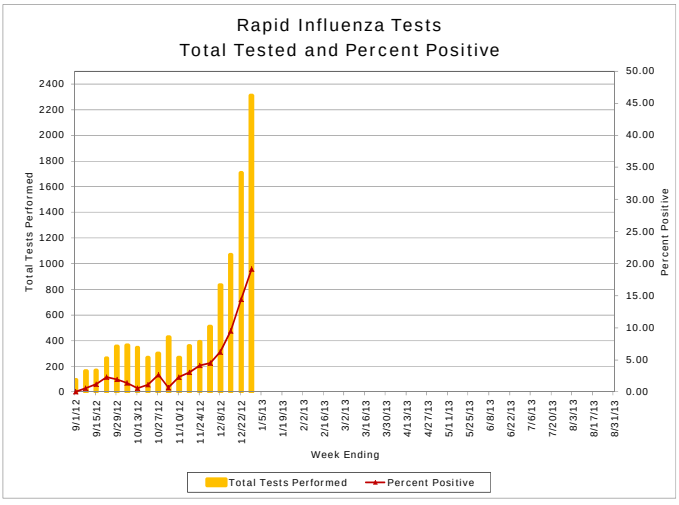


Influenza Positive Specimens (PCR)- Result by Region[3]

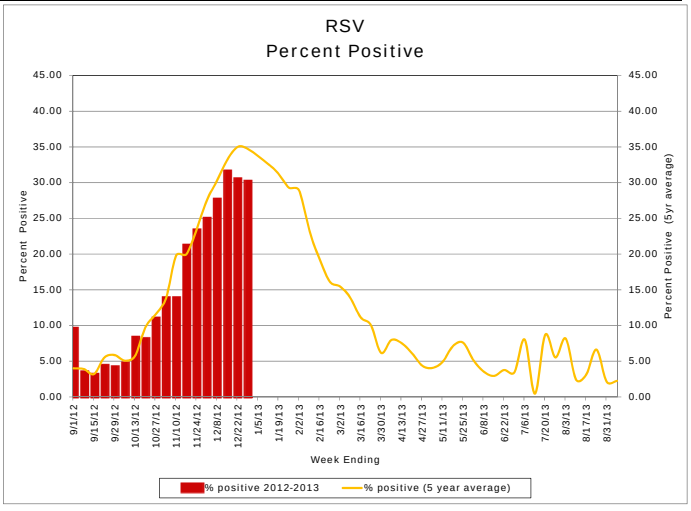


	2012-2013 Cumulative Total				3 week Totals			
	2009 H1N1	AH3	A typing not performed	B	2009 H1N1	AH3	A typing not performed	B
Central East	0	34	81	15	0	17	59	12
Central West	6	32	18	15	3	16	13	8
Northeast	0	16	37	10	0	7	30	3
Northwest	2	30	17	4	1	19	13	3
South	0	28	9	3	0	21	4	2

Influenza Rapid Antigen Result by Week



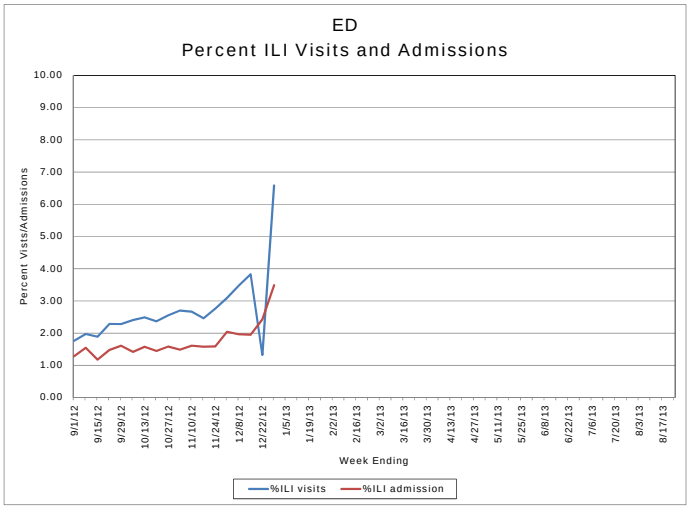
Respiratory Syncytial Virus (RSV) Results by Week



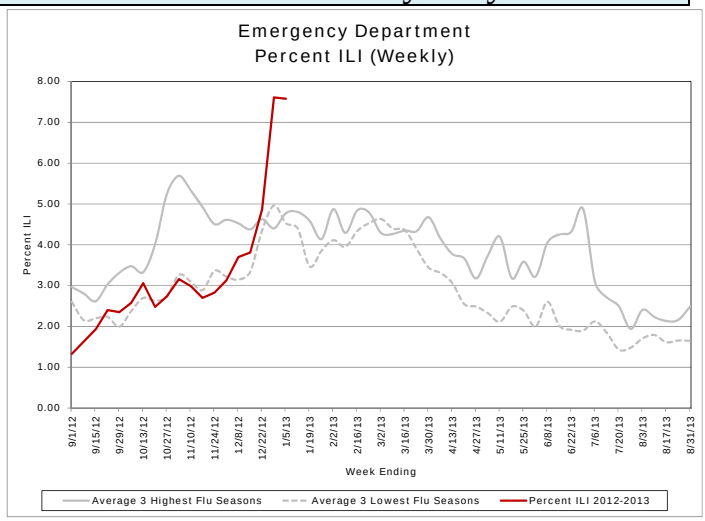
Influenza-like Illness Surveillance

Emergency Department[8]

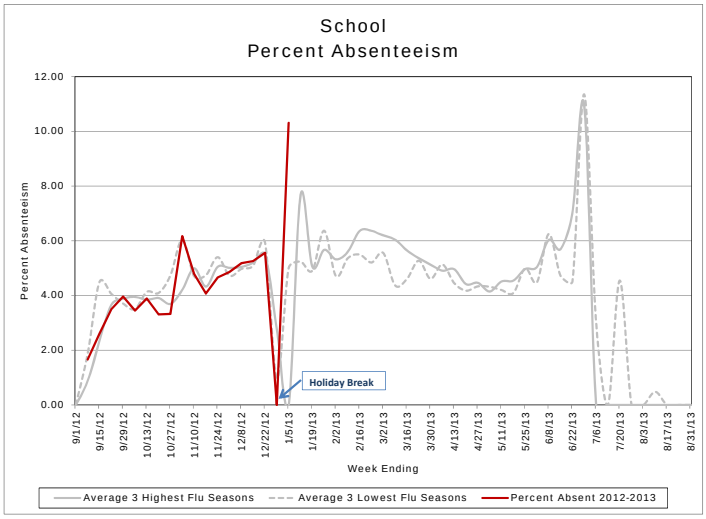
Daily Visits and Admission



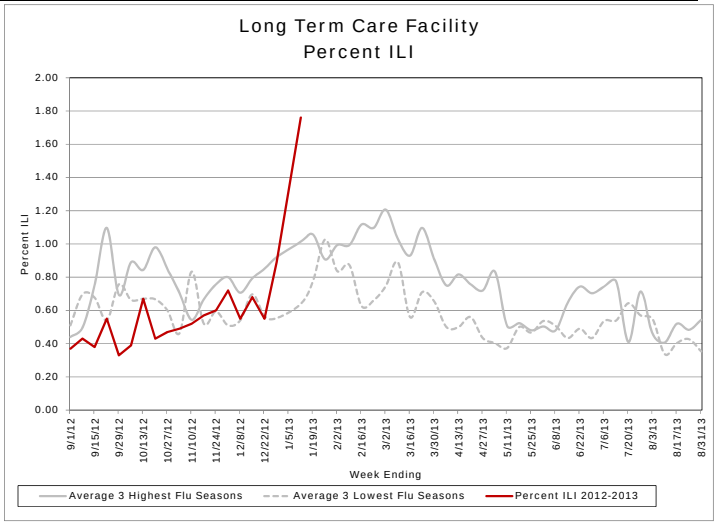
Visits – Tuesday Only



School Absenteeism



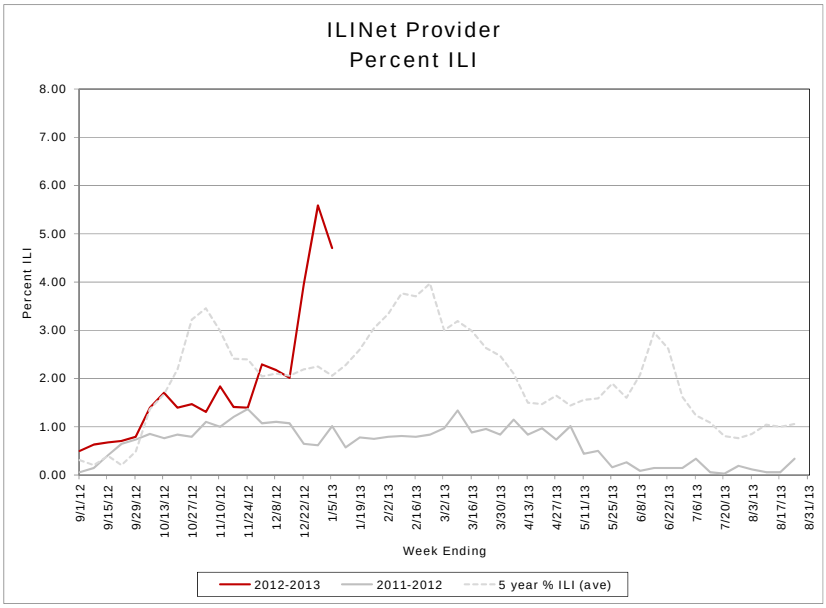
Long Term Care Facilities



Respiratory Outbreaks in Long Term Care Facilities[9]

Cumulative outbreaks 2012-2013 season	27
No. outbreaks last 3 weeks	20
Regions with recent outbreaks	NW(3), NE(3), CW(5), CE(3), S(6)

ILINet Providers



Additional Information

A second report containing information about age specific illness, hospitalization and deaths will be produced on a monthly basis or as needed when important information needs to be disseminated.
For additional information regarding influenza surveillance please visit the following websites.
http://nj.gov/health/flu/surveillance.shtml
http://www.cdc.gov/flu/

Footnotes:

1. This report represents activity occurring in New Jersey related to influenza and RSV. In addition, reports of other circulating respiratory viruses will be included when available.
2. Activity levels for the state and region are defined in Table 1 and 2 at the end of this document.
3. The following is a breakdown of counties contained within each public health region: Northwest: Morris, Passaic, Sussex, Warren; Northeast: Bergen, Essex, Hudson; Central west: Hunterdon, Mercer, Somerset; Central East: Middlesex, Monmouth, Ocean, Union; South: Atlantic, Burlington, Camden, Cape May, Salem, Cumberland, Gloucester
4. Influenza-like illness (ILI) is defined as fever (> 100°F [37.8°C], oral or equivalent) and cough and/or sore throat (in the absence of a known cause other than influenza). For long term care facilities, fever is defined as 2° above baseline temperature.
5. Non-season baseline is calculated by taking the average of statewide percentages of ILI for a 7 year (2006, 2007, 2008, 2009, 2010, 2011, 2012) period during months when influenza is less likely to be circulating (May-August).
6. Three year seasonal averages are determined by calculating the average percent ILI/absenteeism for each influenza season (October to May). These averages are ranked and the three highest and lowest overall season averages were selected. The three highest and lowest numbers were then averaged to obtain a single high and single low value. The season which contribute to the high and low value vary by entity type and are as follows : LTCF (High: 06-07, 07-08, 08-09; Low: 09-10, 10-11,11-12), ED (High: 06-07, 08-09, 09-10; Low: 07-08, 10-11, 11-12) and schools (High: 06-07, 07-08, 08-09 ;Low: 09-10, 10-11,11-12). A week by week average was also calculated using the average of the seasons listed above for each entity type.
7. Viral activity**:** Real-time polymerase chain reaction (PCR) results are obtained from electronic laboratory transmission submitted by acute care, commercial and public health laboratories to CDRSS. Rapid influenza test data and respiratory syncytial virus data are acquired from facilities reporting rapid influenza tests via the National Respiratory and Enteric Virus Surveillance System (NREVSS) or CDRSS ILI module. Counts for cumulative totals begin with week ending October 6, 2012. Three week count data includes current week and two prior weeks. Data presented for RSV and rapid influenza testing represent information for the week prior to the current report week**.**
8. Daily visits and admission associated with ILI from emergency department data is collected via EpiCenter and Hippocrates. Prior to these systems, data on ILI visits were only recorded one day per week usually on Tuesday. This system is maintained as a large amount of historical data allows for better seasonal comparisons.
9. Only LTCF outbreaks reported to NJDOH that received an outbreak number are recorded in this report.

Table 1 **Influenza Activity Level – Definitions for State Activity**				
NJ Level	**CSTE Level**	**Definition**		
		ILI Activity/Outbreaks		**Lab Activity**
Low	No Activity	ILI activity at or below baseline AND no detected outbreaks	AND	No lab confirmed cases
	Sporadic	Low ILI activity detected OR one lab confirmed outbreaks anywhere in the state	AND	Sporadic isolation of laboratory confirmed influenza
Moderate	Local	Increase in ILI activity OR two or more lab confirmed outbreaks in one public health region (Other regions not experiencing increased ILI activity)	AND	Recent (within 3 weeks) laboratory activity in the region with increased ILI
	Regional	Increase in ILI activity OR two or more lab confirmed outbreaks in at least 2 public health regions (Other regions not experiencing increased ILI activity)	AND	Recent (within 3 weeks) laboratory activity in the region with increased ILI
High	Widespread	Increase in ILI activity OR two or more lab confirmed outbreaks in > 2 public health regions	AND	Recent (within 3 weeks) laboratory activity in the region with increased ILI

Table 2 **Influenza Activity Level – Definitions for Public Health Regions**			
NJ Level	**Definition**		
	ILI Activity/Outbreaks		**Lab Activity**
Low	Low ILI activity detected OR one lab confirmed outbreaks anywhere in the region	AND	Sporadic isolation of laboratory confirmed influenza anywhere in the region
Moderate	Increased ILI activity in less than half of the counties in the region OR two lab confirmed outbreaks in the public health region	AND	Recent (within 3 weeks) laboratory activity in same counties of the region with increased ILI
High	Increased ILI activity in more than half of the counties in the region OR three or more lab confirmed outbreaks in the region	AND	Recent (within 3 weeks) laboratory activity in more than half of the counties in the region with increased ILI

Notes:
ILI activity: Systems used to detect increases in ILI activity include: ILINet (i.e., sentinel providers), school absenteeism data, ED ILI visits and admission collected via Hippocrates and EpiCenter systems, LTCF ILI data, LTCF outbreak data, and information on influenza mortality (122 city, influenza associated death report).
Lab Activity: Virologic surveillance data from PHEL and commercial laboratories will be used as the primary data source for the above levels. However, rapid influenza test data will also be considered when determining the appropriate activity levels.

NJ ACTIVE INFLUENZA-LIKE ILLNESS SURVEILLANCE STATISTICS

SURVEILLANCE DATE: 01/01/2013 to 01/01/2013

NEW JERSEY DEPARTMENT of HEALTH and SENIOR SERVICES

County	Long Term Care			Schools			Hospital Emergency Department		
	# Enrolled	# Reports Rec'd	% ILI	# Enrolled	# Reports Rec'd	% Absent	# Enrolled	# Reports Rec'd	% ILI
January, 1, 2013 12:00 AM MMRW WEEK 1									
ATLANTIC	4	1	3.49	51	0	0.00	5	4	1.77
BERGEN	6	1	0.00	36	0	0.00	5	5	8.62
BURLINGTON	6	2	0.00	115	0	0.00	4	3	9.54
CAMDEN	5	0	0.00	17	0	0.00	7	7	8.01
CAPE MAY	7	3	0.00	11	1	5.04	1	1	11.02
CUMBERLAND	2	2	1.56	11	0	0.00	3	3	7.08
ESSEX	10	2	0.59	20	0	0.00	11	8	7.33
GLOUCESTER	5	4	0.75	6	1	2.55	2	2	8.98
HUDSON	16	3	2.78	88	0	0.00	6	5	8.15
HUNTERDON	4	4	1.17	8	0	0.00	1	1	6.72
MERCER	10	0	0.00	27	0	0.00	5	5	7.92
MIDDLESEX	20	0	0.00	35	0	0.00	6	6	7.85
MONMOUTH	14	4	1.00	26	9	13.08	5	5	7.28
MORRIS	4	0	0.00	5	0	0.00	4	4	3.66
OCEAN	20	13	2.91	22	0	0.00	4	3	16.36
PASSAIC	9	0	0.00	51	0	0.00	3	3	9.09
SALEM	2	0	0.00	10	0	0.00	1	1	1.75
SOMERSET	6	1	1.18	87	2	3.23	1	1	6.71
SUSSEX	5	5	1.66	24	0	0.00	2	2	0.88
UNION	3	0	0.00	195	0	0.00	5	5	1.36
UNKNOWN	0	0	0.00	1	0	0.00	0	0	0.00
WARREN	4	0	0.00	27	0	0.00	2	2	5.84
NW Region	22	5	1.66	107	0	0.00	11	11	6.02
NE Region	32	6	1.74	144	0	0.00	22	18	7.92
CW Region	20	5	1.17	122	2	3.23	7	7	7.52
CE Region	57	17	2.52	278	9	13.08	20	19	8.30
South Region	31	12	1.05	221	2	3.76	23	21	7.16
State Total	**162**	**45**	**1.76**	**872**	**13**	**10.31**	**83**	**76**	**7.58**

NJ ACTIVE INFLUENZA-LIKE ILLNESS SURVEILLANCE STATISTICS

SURVEILLANCE DATE: 01/01/2013 to 01/01/2013

NEW JERSEY DEPARTMENT of HEALTH and SENIOR SERVICES

County	RSV Tests # Positive	RSV Tests Total Tests Performed	Flu Tests # Positive	Flu Tests Total Tests Performed
January, 1, 2013 12:00 AM MMRW WEEK 1				
ATLANTIC	40	138	55	310
BERGEN	10	35	112	567
BURLINGTON	0	0	4	23
CAMDEN	12	27	17	118
CAPE MAY	6	17	3	33
CUMBERLAND	0	0	0	0
ESSEX	17	63	74	384
GLOUCESTER	11	42	26	128
HUDSON	0	0	0	0
HUNTERDON	46	141	4	17
MERCER	3	13	3	18
MIDDLESEX	0	0	0	0
MONMOUTH	0	0	65	353
MORRIS	3	10	24	101
OCEAN	9	43	12	79
PASSAIC	0	0	0	0
SALEM	0	0	0	0
SOMERSET	6	19	18	58
SUSSEX	5	11	6	51
UNION	0	0	0	0
WARREN	1	5	20	70
NW Region	9	26	50	222
NE Region	27	98	186	951
CW Region	55	173	25	93
CE Region	9	43	77	432
South Region	69	224	105	612
State Total	**169**	**564**	**443**	**2310**